LASER DETECTORS

Intelligent laser smoke detectors 7251 and LZR-1M for FX NET Fire Detection System

Schneider Electric's Laser detectors detect incipient fires, by sensing the earliest particles of combustion, invisible to the human eye.

Laser is highly sensitive and stable, to protect environments, where rapid response and pinpoint accuracy are critical. Typical are telecommunications facilities, data centers, manufacturing clean rooms, traffic control centers and museums.

The function of the Laser detector is based on the scattering of a focused, high-intensity laser beam instead of an infrared LED used in ordinary optical smoke detectors.

The high sensitivity of the Laser detector is achieved by combining a patented optical chamber with the latest laser diode and most precise optical technology. It makes the Laser detector up to 100 times more sensitive than standard photoelectric detectors and it can be set to sense 0.07 … 6.56% per metre obscuration.

In addition the laser detector uses an advanced digital signal processing to discriminate between effects of dust, steam, high ambient air velocity etc. and combustion products generated by a real fire. This combines stability to a very early alarm signal.

The Laser detector can be tested easily; there is a built-in magnetic test switch. Dual LEDs provide 360° viewing angle. The bi-colour LEDs blink green (optionally) for normal condition and are steady lit red in alarm condition.

Rotary decade switches allow quick and easy selection of the detector address. The Laser detector is installed by putting it into its base and simply turning it until it snaps in place. It can be installed to the same loop with other intelligent detectors.

Sensitivity and other application settings are set with the WinFXNet configuration software, individually for each Laser detector. It is possible to separately choose pre-alarm and fire alarm levels. A dirty detector will give an addressed service message.

LZR-1M and **FX NET** do have an automatic Laser group feature. Measuring values of laser detectors installed in the same detection zone are mutually taken into account in the fire decision.

When several laser detectors, in the same group, sense increased levels of smoke, the FX NET issues an alarm even before any of the individual detectors reach their alarm setting. It makes the early warning even more rapid.

Schneider Electric

Technical specifications

	Detectors	
	7251	**LZR-1M**
Operating voltage	15 … 32 Vdc	
Max stand-by current @ 24Vdc, 25°C, LED not blinking	230 µA	
Max alarm current (LED on)	6,5 mA	
Operating temperature	-10°C … +55 °C	
Max. allowed relative humidity	93%, non-condensing	
Outside dimensions with base B501 (Ø x height)	104 x 42 mm	
Weight	142 g	
Colour	Pantone, warm grey 1C	
Material	Bayblend FR110	
IP Rating	According to mounting base	
Mounting bases	B501AP, B500 Series (B501, B501DG, B524HTR-W, B524RTE-W, B524EFT-1)	
Standard and classification	EN 54-7	
Product number	FFS06710070	FFS06710055

Schneider Electric Fire & Security OY reserves the right to modifications.